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| 10/553,671      | 10/17/2005  | Valerie Bicard-Benhamou | MERCK-2686-2        | 1527             |

23599 7590 09/30/2010  
MILLEN, WHITE, ZELANO & BRANIGAN, P.C.  
2200 CLARENDON BLVD.  
SUITE 1400  
ARLINGTON, VA 22201

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| EXAMINER |
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RAO, SAVITHA M

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| ART UNIT | PAPER NUMBER |
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1614

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09/30/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@mwzb.com

|                              |                        |                        |  |
|------------------------------|------------------------|------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>    |  |
|                              | 10/553,671             | BICARD-BENHAMOU ET AL. |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>        |  |
|                              | SAVITHA RAO            | 1614                   |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-17, 19-37, 42, 43 and 45 is/are pending in the application.
- 4a) Of the above claim(s) 29-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17, 19-28, 33-37, 42, 43 and 45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Claims 1-17, 19-37, 42, 43 and 45 of the instant application are pending.

Receipt and consideration of Applicant's remarks/arguments filed on 07/15/2010 is acknowledged. Claim 29-32 remain withdrawn from consideration a being drawn to a non-elected invention or specie. Claims under consideration in the instant office action are claims 1-17, 19-28, 33-37, 42-43 and 45.

Applicants' arguments, filed 07/15/2010 have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

### ***Terminal Disclaimer***

The terminal disclaimer filed on 07/15/2010 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of pending reference application number 10/553,668 filed on 10/17/2005 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Rejection of claims 1-3, 6-17, 19, 33-37, 42, 43 and 45 under 35 U.S.C. 103(a) as being unpatentable over Seo et al. (US 6030627) in view of Bagala, Sr. (U.S. Patent No. 7,045,007B2; Cited in a previous Action) is maintained for reasons of record restated below.**

It is respectfully pointed out that the limitations with respect to the antimicrobial pigment recited in claim 1 and claims 10-13, 14-17 and 35-37 are product-by-process

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claims. As per MPEP section 2113 (R-1) product by process claims. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed Cir. 1985). See MPEP 2113. Thus, because the combination of the following references discloses a product that is similar to what is instantly claimed, then the process limitations, while considered, are not patentably *limiting* to the claims because the prior art discloses an identical product and, therefore, the manner in which it was made fails to apparently result in a product different from that which is already known in the prior art.

Seo *et al.* teaches, an antimicrobial cosmetic pigment comprising inorganic cosmetic pigment, amorphous glassy coating layer of metal oxide having a lattice structure formed over the surface of said inorganic cosmetic pigment and antimicrobial metals or antimicrobial metal ions intercalated inside the lattice structure of said coating layer of metal oxides and teaches wherein the inorganic cosmetic pigment may be mica, zinc oxide, and titanium dioxide, for example, and wherein the coating layer of metal oxide comprises silica alone, or as the main ingredient and one or more of zinc oxide and ferric oxide, for example (reference claims 1, 3, 4, 7 and 8). Furthermore, in the instant excerpt, Seo *et al.* teaches wherein the antimicrobial metal is one or more of silver and zinc, for example, and comprises 0.00001 to 5.0 parts by weight to 100 parts

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of the coating layer of metal oxide. With reference to the cosmetically or dermatologically suitable vehicles Seo et al teaches examples 10, (table 8, column 15) and example 11 (Table 9, column 15) teaches formulation comprising his inventive antimicrobial pigment with cosmetically and dermatologically suitable vehicles such as purified water, propylene glycol, cetosteryl alcohol (example 10) and purified water, glycerin, polyvinyl alcohol and ethanol (example 11).

With respect to instant claims 2 and 19, Seo *et al.* teaches that adding preservatives to cosmetics prevents deterioration, change of smells, i.e., malodor, and change of fragrance by microbes, or microorganisms, and germination of fungi by sterilizing or restraining the breeding of the microbes (column 1, lines 17-23, and column 2, lines 9-18 In column 5, lines 33-45). Seo et al. further teaches that his inventive antimicrobial pigment shows excellent effects when combined with other preservatives (col.1, lines 57-60).

With reference to instant claim 3, Seo *et al.* teaches, that the cosmetic of the reference invention may be in the form of a creams used as skin care products such as sunscreen cream, cream, lotion, skin conditioner etc., wherein the antimicrobial cosmetic pigments, which encompass inorganic cosmetic pigments, amorphous glassy coating layer of metal oxide, and antimicrobial metals, for example, may be in a quantity for use in cosmetics, preferably at 0.01-30 weight percent (column 8, lines 34-58).

With reference to instant claims 4-5, Seo et al. teaches that microbes including bacteria need water and nutrients to reproduce and cosmetics contains may kinds of raw materials, the carbon source of which can be used by the microorganisms to

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reproduce (column 1, line 66 to col.2,line 4). Seo et al. also teaches a liquid foundation of his invention, which comprises Xanthum gum (sugar), sorbitane sesquioleate and stearic acid (fatty acids) and water (Table 8, Example 10).

With respect to instant claims 6, 14 and 15, Seo et al. teaches his antimicrobial cosmetic pigment comprising inorganic pigment of either metal oxides such as aluminum oxide, zinc oxide, titanium oxide, mica, barium sulphate etc. to have an average granular diameter within the range of 0.1-50  $\mu\text{m}$  which suggests that the particles disclosed by Seo et al. was spherical in nature (reference claim 2, and column 4, lines 54-56).

With respect to instant claims 10 and 12-13, Seo et al. teaches an amorphous glassy coating layer of metal oxides over the surface of inorganic cosmetic pigments made of silica ( $\text{SiO}_2$ ), zinc oxide, magnesium oxide, calcium oxide, etc (column 4., line 63 to column , line 3).

With respect to instant claim 15-17, Seo et al. teaches in the method of preparation of his antimicrobial pigment particles, to have a first coating of silica over the surface or the inorganic pigment and than applying a second coating with metal oxides (col.6, line 12, lines 26-33) which suggests multiple layers and also suggests the use of silica as a protective layer on the pigment.

With respect to instant claim 33, Seo et al. teaches his inventive antimicrobial pigment in formulation which comprises customary excipient such as propylene glycol, lecithin (wax) and purified hohoba oil (vegetable fat) (example 11, column 15, items 3, 6 and 9))

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Finally Seo et al. teaches his inventive antimicrobial cosmetic pigment to have excellent antimicrobial activity, and not only does the cosmetics containing them possess outstanding preservative activity compared with those containing conventional preservatives, but they demonstrate consistent preservative effects and as such can be used advantageously as inorganic preservative agents of excellent preservative activity and good security for skin for all sorts of cosmetics (column. 16, lines 48-56). Seo et al. also teaches his inventive pigment to be free of the restraint of pH ranges in cosmetic compositions, excellent in the effects from a combined use with other preservatives and does not lower the concentrations or decrease the activity through entering into the micelle of the used nonionic surfactants and or forming complexes and in addition it exercises excellent antimicrobial activity making it possible to produce cosmetic compositions of excellent dermal safety and protection against secondary contamination with microbes while the product is in transit (column 1, line 57 to column 2, line 9).

With respect to the limitations recited in instant claim 45, wherein the color of the inorganic pigment before being combined with silver and the color of the resultant antimicrobial pigment are the same, Seo et al. teaches that the composition of the coating layer with metal oxide is similar to glass which means the final color of the pigment will be the same as the initial color. Seo et al. in addition teaches that ferric oxide which imparts further stability to the coating but also provides color can be included in his preparation. It is noted that the amount of ferric oxide taught by Seo et al ranges from 0-3% by weight which suggests composition comprising 0% or no ferric oxide in which case the color of the inorganic pigment after combining with silver would



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be the same as the color before combining with silver.

Seo *et al.* fail to disclose specifically wherein one or more layers of transparent, semitransparent or opaque, selectively absorbing, nonselectively absorbing or nonabsorbing metal oxides, i.e., titanium dioxide, are arranged as alternating layers wherein the refractive index  $n > 1.8$  and  $n < 1.8$  and also fails to teach wherein the Hunter model I, a and b values of said pigment particles with silver oxide as recited in instant claim 1 and 42.

However, Bagala, Sr. *et al.* teaches an effect pigment comprising metal oxide-coated laminar platelets in which the platelets are a mixture of about 5 to 90% platy glass and 90 to 5% platy mica, i.e., synthetic mica (reference claims 1-8, columns 11 and 12, column 1, line 50), wherein the metal oxide comprises iron oxide (inorganic colorant or dopant; instant claim 13) and titanium dioxide. In the instant excerpt, Bagala, Sr. *et al.* further teaches wherein the metal oxide coating comprises a plurality of layers, each of which comprises a metal oxide. Bagala, Sr. *et al.* teaches the effect pigments constructed with a reflecting layer, i.e., silver, which is overcoated with a low index of refraction material typically having a refractive index from 1.3 to 2.5, which, in turn, may be overcoated with a layer comprising iron and titanium dioxides (column 4, lines 38-52). Bagala, Sr. *et al.*, further teach applications in which the referenced pigments may be used, such as mascara cake/cream, shaving cream and eye shadow cream (instant claim 3 and column 6, lines 52-63). , Bagala, Sr. *et al.* disclose effect pigments constructed with a reflecting layer, i.e., silver, which is overcoated with a low index of refraction material typically having a refractive index from 1.3 to 2.5, which, in

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turn, may be overcoated with a layer comprising iron and titanium dioxides ( column 4, lines 38-52).

With respect to the limitations wherein the materials of the layers have a refractive index  $n > 1.8$  and  $n < 1.8$  as recited in instant claim 11 and wherein the Hunter model I, a and b values of said pigment particles with silver oxide as recited in instant claim 1 and 42, The antimicrobial pigment taught by Seo et al. has the same make up of metal oxides and pigments as instantly claimed. As such the refractive index and the Hunter model values are functional limitations of the antimicrobial pigments. . Since the reference teaches using the instantly claimed antimicrobial pigment comprising the instantly claimed mica with layers of metal oxide and silica it necessarily follows that the antimicrobial pigment particle of Seo et al. will possess these values as alleged by the Applicant, absent factual evidence to the contrary. "Products of identical chemical composition can not have mutually exclusive properties." A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or claims are necessarily present. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).Office lacks laboratory facilities to test the prior art compounds and compositions. It is incumbent upon applicants to provide data demonstrating that the properties of the disclosed prior art compounds/compositions are different from the claimed compositions.

In view of the foregoing references, the instantly formulation for topical application comprising antimicrobial pigment would have been prima facie obvious to

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one of ordinary skill in the art at the time the invention was made. Seo et al. teaches antimicrobial particles comprising silver as the antimicrobial agent incorporated on to inorganic pigment coated with metal oxides. Seo et al. further teaches the advantages of the antimicrobial pigment of his invention to have excellent preservative properties and is amenable for topical application as detailed above. Accordingly, an ordinarily skilled artisan would be motivated by the teachings of Seo et al. to develop a formulation comprising an antibacterial pigment made up of inorganic pigment coated with metal oxides since it not only would perform as a better preservative than conventional preservative but also possess consistent preservative effects, thereby increasing the shelf life of the product and is also highly amenable to topical dermal use. An ordinarily skilled artisan will be imbued with at least a reasonable expectation of success that such a formulation would provide lasting stability to the product and also prevent with least side effects and increased patient compliance.

Accordingly, the instant invention, as claimed in claims 1-3, 6-17, 19, 33-37, 42, 43 and 45 is *prima facie* obvious over the combination of the aforementioned teachings.

**Rejection of instant claims 20-28 under 35 U.S.C. 103(a) as being unpatentable over Seo et al. and Bagala et al. , as applied to claims 1-3, 6-17, 19, 33-37, 42, 43 and 45 above, and further in view of Vollhardt (U.S. Patent No. 6,274,124B1; Cited in a previous Action) , Scott et al. (U.S. Patent No. 6,482,397B1; Cited in a previous Action), and Eini et al. (US 2003/0157138) are maintained for reasons of record restated below.**

The teachings of Seo et al. and Bagala et al. are as recited *supra*.

Seo et al and Bagala *et al.* fail to disclose specifically the inclusion of ingredients, such as one or more UV filters, skin-protecting or skin-care active ingredients, or at least one photostabilizer (instant claims 22, 27 and 28, respectively), at least one antibiotic (instant claims 20 and 21), at least one self-tanning agent (instant claim 23) and vitamins (instant claim 26);

However, Vollhardt discloses, in the Abstract, a conventional cosmetic or dermatological active agent in a cosmetically and/or pharmaceutically acceptable carrier for topical application to the skin of humans. Vollhardt discloses, in column 4, line 36 through column 5, line 54, wherein the formulation is suitable for the addition of 1,2-pentanediol, an emulsifier, which in addition to UV filter substances, may comprise antioxidants and inorganic pigments. Furthermore, in the instant excerpt, Vollhardt discloses wherein the formulation may further comprise at least one antiperspirant and/or at least one skin whitening compound, which would have been reasonably construed by a skilled artisan, at the time of the invention, to be skin-protecting or skin-care active ingredients. In column 1, lines 42-49, Vollhardt discloses the UV filter substance 2-phenylbenzimidazol, a known photostabilizer. Additionally, in column 2, lines 12-20, Vollhardt discloses wherein the aforementioned inorganic pigments, coated or uncoated, are known to be used in sunscreen products to help protect the skin from UV rays. In the instant excerpt, Vollhardt further discloses wherein the inorganic pigments, such as oxides of titanium, zinc and iron, are typically used in addition to organic UV filter substances. Therefore, a skilled artisan would have envisaged the

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cosmetic formulation comprising the modified antimicrobial cosmetic pigment of the combined teachings, as disclosed by Seo et al. and Bagala, Sr., further comprising conventional active ingredients, such as UV filter substances, skin-protecting or skin-care active ingredients, and at least one photostabilizer, as disclosed by Vollhardt. One of ordinary skill in the art would have been motivated to combine the teachings of the aforementioned references when seeking a novel cosmetic or dermatological composition with increased water resistance and light (sun) protection. It would have been obvious to one of ordinary skill in the art, at the time of the invention, because the combined teachings of the prior art are fairly suggestive of the claimed invention.

Scott *et al.* disclose, in reference claims 1-3, a composition comprising an artificial tanning effective amount of a self-tanning agent, i.e. dihydroxyacetone (DHA), a coloring agent, and a cosmetically acceptable carrier adapted for topical application to human skin. Additionally, Scott *et al.* disclose, in column 1, lines 52-65, that though DHA is used as a widely accepted self-tanning agent, coloring agents are included in sunless tanning compositions to provide the applier the ability to more accurately assess where they have applied the compositions to their skin. In column 4, line 49, through column 5, line 42, Scott *et al.* disclose wherein the composition further comprises antimicrobial agents, preservatives, antioxidants, vitamins and waxes, for example. In the instant excerpt, Scott *et al.* further disclose wherein antimicrobial agents and preservatives inhibit microbial growth in the compositions, and can be used to treat infected, or potentially infected, areas of skin.

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Eini et al. discloses a pharmaceutical or cosmetic compositions for topical application comprising an antibiotic agent such as tetracycline, fluoroquinolones, quinolone and macrolides (reference claims 49-50, paragraphs [0075]). As such use of antibiotics in cosmetic compositions is known in the art.

Therefore, a skilled artisan would have envisaged the composition comprising the modified antimicrobial cosmetic pigment of the combined teachings Seo et al. and Bagala et al., further comprising one or more of the conventional active ingredients, such as at least one antibiotic, at least one self-tanning agent, i.e., dihydroxyacetone, and vitamins as taught by Vollhardt, Scott et al., and Eini et al. An ordinarily skilled artisan would be motivated to utilize the appropriate active ingredient based on the ultimate utility of the formulation being prepared for e.g. an U.V protecting agent in the formulation of a sunscreen lotion. One of ordinary skill in the art would have been motivated to combine the teachings of the aforementioned references when preparing a composition comprising a light, water and heat resistant antimicrobial inorganic pigment to be applied topically. It would have been obvious to one of ordinary skill in the art, at the time of the invention, because the combined teachings of the prior art are fairly suggestive of the claimed invention.

**Response to applicant's arguments filed on 07/15/2010:**

Applicant traverses the above rejection with the following arguments:

The claimed composition is structurally different from the prior art due to process used to make the composition as recited in the claims and contrary to the assertion in the rejection, the process features recited in the claims define a product which is

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different from the prior art., The prior art teaches antimicrobial pigment prepared by intercalation process wherein silver is intercalated into the lattice structure of metal oxide amorphous glassy coating layer by roasting and/or sintering at high temperatures where as in the instantly claimed product is produced by a gentler condition of agitating a suspension comprising inorganic pigment and silver oxide at a temperature of 10 °C to 60° C. None of the references used suggest obtaining an antimicrobial inorganic pigment by agitating a suspension comprising one or more inorganic pigments and silver oxide at a temperature of 10 °C to 60° C., wherein the among of silver oxide of 0.01% to 0.5% by weight, based on the total weight of the pigment or that the pigment particles having Hunter model I values as instantly claimed. **Basically, applicants argue that the instantly claimed antimicrobial pigment is structurally different from that of Seo et al. as they are prepared by different procedures.**

**Applicant's traversal arguments for this rejection have been fully considered, but are not found to be persuasive.**

Applicant is reminded that as quoted in MPEP 2113[R-1] “[E]ven though product-by-process claims are limited by and defined by the process; determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Although the process of preparation of the antimicrobial pigment in the prior art is different from the instantly claimed antibacterial

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pigment, applicant has not given actual differences in the end product obtained which is the antibacterial pigment and its utility. Seo et al. discloses inorganic cosmetic pigment coated with antimicrobial silver at concentrations of 0.00001-5 parts by weight of 100 parts of the coating layer of metal oxide and teaches the incorporation of this antimicrobial pigment in cosmetics with suitable vehicles such as purified water, propylene glycol etc and further comprises other ingredients such as preservatives and may be in the form of cream, lotion etc which has excellent antimicrobial activity and cosmetics comprising them have excellent preservative activity. As such both the instantly claimed product and that of Seo et al. comprises antimicrobial silver over inorganic pigments which are used to decrease undesirable side-effects caused by microorganisms in cosmetics. The fact that the silver oxide is added by gentle agitation instead of the intercalation product does not change the end product. Applicants have not provided any concrete evidence of an unobvious difference between the two products, such as comparing the two methods to establish an unexpected property of their composition over that of Seo et al., since the material appear to be identical or only slightly different. It is noted that "[T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. The structural limitations which the applicant's are arguing as being imparted on their product by the procedure they are using are not instantly claimed in the products.

Accordingly, the arguments set forth by the applicant are unpersuasive and the



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rejection is maintained.

### ***Conclusion***

1-17, 19-28, 33-37, 42-43 and 45 are rejected, no claims are allowed

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAVITHA RAO whose telephone number is (571)270-5315. The examiner can normally be reached on Mon-Fri 7.00 am to 4.00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SAVITHA RAO/  
Examiner, Art Unit 1614

/Ardin Marschel/  
Supervisory Patent Examiner, Art Unit 1614